IN THE CLAIMS

Claims 1- 9 (Cancelled)

10. (Previously Presented) A method of rendering a surface of a pane of glass resistant to soiling and staining, comprising:

providing a sheet of glass having a clean interior surface and a clean exterior surface and a sputtering line comprising a series of sputtering chambers each having a plurality of transport rollers for conveying the sheet of glass along the sputtering line, at least one of the sputtering chambers comprising a downward sputtering chamber having an upper target positioned above the transport rollers, a second of the sputtering chambers comprising an upward sputtering chamber having a lower target positioned below the transport rollers;

positioning the sheet of glass on the transport rollers in the downward sputtering chamber such that the interior surface is oriented toward the upper target and sputtering the upper target to deposit a dielectric layer on one of the interior surface of the glass or a film stack layer previously deposited on the interior surface of the glass;

positioning the sheet of glass on the transport rollers in the upward sputtering chamber such that the exterior surface is oriented toward the lower target and sputtering the lower target to deposit a water-sheeting coating on the exterior surface of the glass.

11. (Original) The method of claim 10 wherein the upward sputtering chamber further comprises an upper target positioned above the support, further comprising sputtering the upper target to deposit a dielectric layer on one of the interior surface of the glass or a film stack layer previously deposited on the interior surface of the glass while the sheet of glass remains in the upward sputtering chamber.

12. (Currently Amended) A method of rendering a surface of a pane of glass resistant to soiling and staining, comprising:

providing a sheet of glass having a clean interior surface and a clean exterior surface and a sputtering line comprising a series of sputtering chambers each having a plurality of transport rollers for conveying the sheet of glass along the sputtering line, at least one of the sputtering chambers comprising a dual direction sputtering chamber having an upper target positioned above the transport rollers and a lower target positioned below the transport rollers;

positioning the sheet of glass on the transport rollers in the dual direction sputtering chamber such that the interior surface is oriented toward the upper target and the exterior surface is oriented toward the lower target; and

while the sheet of glass remains in the dual direction sputtering chamber

i) sputtering the upper target to deposit a dielectric layer on one of the interior surface of the glass or a film stack layer previously deposited on the interior surface of the glass; and

ii) sputtering the lower target to deposit a water-sheeting coating on the exterior surface of the glass.

13. (Currently Amended) A method of coating two sides of a single pane of glass in a single pass through a coating apparatus, comprising:

providing a sheet of glass having a clean interior surface and a clean exterior surface and a sputtering line comprising a series of sputtering chambers each having a plurality of transport rollers for conveying the sheet of glass along the sputtering line, at least one of the sputtering chambers comprising a downward sputtering chamber having an upper target positioned above the transport rollers, a second of the sputtering chambers comprising an upward sputtering chamber having a lower target positioned below the transport rollers;

positioning the sheet of glass on the transport rollers in the downward sputtering chamber such that the interior surface is oriented toward the upper target and sputtering the upper target to deposit a coating directly on one of the interior surface of the glass or a film stack layer previously deposited on the interior surface of the glass;

positioning the sheet of glass on the transport rollers in the upward sputtering chamber such that the exterior surface is oriented toward the lower target and sputtering the lower target to deposit a coating on one of the exterior surface of the glass or a film stack layer previously deposited on the exterior surface of the glass, the glass being coated on both the interior surface and the exterior surface while maintaining a constant orientation wherein the interior surface is positioned above the exterior surface.

14. (Original) The method of claim 13 wherein the lower target comprises silicon, said lower target being sputtered in an oxidizing atmosphere to deposit a water-sheeting coating directly on the exterior surface of the glass.

Claims 15-21 (Cancelled)

22. (Previously Presented) The method of claim 13 wherein the transport rollers are spaced apart and the lower target is sputtered upwardly between the transport rollers.

23. (Previously Presented) The method of claim 13 wherein the sheet of glass is conveyed horizontally over the transport rollers during said sputtering of the lower target and during said sputtering of the upper target.

24. (Previously Presented) The method of claim 23 wherein the sheet of glass is conveyed over the transport rollers so that the coating deposited on the exterior surface of the glass sheet comes into direct contact with the transport rollers.

25. (Previously Presented) The method of claim 13 wherein said coating sputtered downwardly from the upper target is part of a film stack comprising a series of distinct layers, wherein said coating sputtered upwardly from the lower target is a water-sheeting coating, and wherein said film stack has a greater thickness than the water-sheeting coating.

26. (Previously Presented) The method of claim 13 wherein said coating deposited by sputtering the lower target upwardly is a water-sheeting coating, and wherein said coating deposited by sputtering the upper target downwardly is part of a low-emissivity film stack.

27. (Previously Presented) The method of claim 26 wherein said coating deposited by sputtering the upper target downwardly is a dielectric layer of the low-emissivity film stack.

28. (Previously Presented) The method of claim 26 wherein said water-sheeting coating is deposited in a last of the sputtering chambers in the sputtering line.

29. (Previously Presented) The method of claim 26 wherein said water-sheeting coating is deposited to a median thickness of between about 15Å and about 150Å.

30. (Previously Presented) A coating apparatus for coating two sides of a single pane of glass in a single pass through the coating apparatus, the coating apparatus

comprising a support for supporting the pane of glass horizontally in the coating apparatus, the support comprising a series of spaced-apart transport rollers, an upper sputtering target positioned above the support within a chamber of the coating apparatus for sputtering a coating onto the upper surface of the pane of glass, and a lower sputtering target positioned below the support within a chamber of the coating apparatus for sputtering a coating onto the lower surface of the pane of glass.

31. (Previously Presented) The coating apparatus of claim 30 wherein the upper sputtering target and the lower sputtering target are both in the same chamber of the coating apparatus.

32. (Previously Presented) The coating apparatus of claim 30 wherein the upper sputtering target is in a first chamber and the lower sputtering target is in a second chamber.

33. (Previously Presented) The coating apparatus of claim 30 wherein the coating apparatus includes further chambers each including an upper or lower sputtering target provided above or below the support respectively.

34. (Previously Presented) The coating apparatus of claim 30 comprising a lower anode proximate the lower target, and an upper anode proximate the upper target.

35. (Previously Presented) The coating apparatus of claim 30 comprising a lower gas distribution pipe located below the support adjacent the lower target, and an upper gas distribution pipe located above the support adjacent the upper target.

36. (Previously Presented) A method of coating two sides of a single pane of glass in a single pass through a coating apparatus, comprising:
providing a sheet of glass having an interior surface and an exterior surface and a sputtering line comprising a series of sputtering chambers each having a

support for a sheet of glass therein, the support comprising a series of spaced-apart transport rollers, at least one of the sputtering chambers comprising a downward sputtering chamber having an upper target positioned above the support, a second of the sputtering chambers comprising an upward sputtering chamber having a lower target positioned below the support;

conveying the sheet of glass horizontally through the downward sputtering chamber on transport rollers such that the interior surface is oriented toward the upper target and the exterior surface is in direct contact with such transport rollers, sputtering the upper target downwardly to deposit a coating on the interior surface, wherein the coating deposited by downwardly sputtering the upper target is part of a low-emissivity film stack; and

conveying the sheet of glass horizontally through the upward sputtering chamber on transport rollers such that the exterior surface is oriented toward the lower target and is in direct contact with such transport rollers, sputtering the lower target to deposit a coating on the exterior surface, the lower target being sputtered upwardly between transport rollers in the upward sputtering chamber, wherein said coating deposited by sputtering the lower target upwardly is a water-sheeting coating, and wherein said water-sheeting coating on the exterior surface comes into direct contact with transport rollers in the upward sputtering chamber during said conveyance of the sheet of glass through the upward sputtering chamber.

37. (Previously Presented) A method of coating two sides of a single pane of glass in a single pass through a coating apparatus, comprising:

providing a sheet of glass having a clean interior surface and a clean exterior surface and a sputtering line comprising a series of sputtering chambers each having a support for one or more sheets of glass therein, at least one

of the sputtering chambers comprising a downward sputtering chamber having an upper target positioned above the support, a second of the sputtering chambers comprising an upward sputtering chamber having a lower target positioned below the support;

positioning the sheet of glass on the support in the downward sputtering chamber such that the interior surface is oriented toward the upper target and sputtering the upper target to deposit a coating either entirely over the interior surface of the glass or entirely over a film stack layer previously deposited entirely over the interior surface of the glass;

positioning the sheet of glass on the support in the upward sputtering chamber such that the exterior surface is oriented toward the lower target and sputtering the lower target to deposit a coating either entirely over the exterior surface of the glass or entirely over a film stack layer previously deposited entirely over the exterior surface of the glass.

38. (Previously Presented) The method of claim 37 wherein the support comprises spaced-apart transport rollers, the lower target being sputtered upwardly between such rollers.

39. (Previously Presented) The method of claim 38 wherein the sheet of glass is conveyed horizontally over the transport rollers during said sputtering of the lower target and during said sputtering of the upper target.

40. (Previously Presented) The method of claim 38 wherein the sheet of glass is conveyed over the transport rollers so that the coating deposited on the exterior surface of the glass sheet comes into direct contact with the transport rollers.

41. (Previously Presented) The method of claim 37 wherein said coating sputtered downwardly from the upper target is part of a film stack comprising a series of distinct layers, wherein said coating sputtered upwardly from the lower target is a

water-sheeting coating, and wherein said film stack has a greater thickness than the water-sheeting coating.

42. (Previously Presented) The method of claim 37 wherein said coating deposited by sputtering the lower target upwardly is a water-sheeting coating, and wherein said coating deposited by sputtering the upper target downwardly is part of a low-emissivity film stack.

43. (Previously Presented) The method of claim 42 wherein said coating deposited by sputtering the upper target downwardly is a dielectric layer of the low-emissivity film stack.

44. (Previously Presented) The method of claim 42 wherein said water-sheeting coating is deposited in a last of the sputtering chambers in the sputtering line.

45. (Previously Presented) The method of claim 42 wherein said water-sheeting coating is deposited to a median thickness of between about 15Å and about 150Å.